

ABSTRACT OF THE DISCLOSURE

A method is described for the preparation, characterization and utilization of temporally ordered panels of cDNA libraries from human microclones. Each microclone undergoing morphogenetic differentiation *in vitro* differs in discrete gene expression. The developmental stage of the microclone is determined and the gene expression patterns of the microclones temporally ordered and arranged into expression profiles and temporal spectra. Direct comparison of the cDNAs produced from different neural microclones allows identification of novel RNA transcripts.